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REMARKS

In the Office Action dated August 24, 2004, claims 1-25 are pending. Claims 17 and 21 are canceled. Claims 1-6, 8, 10-12, 14-16, 18, and 22 have been amended. Claims 1, 16, and 18 are independent claims from which claims 2-15, 19-20, and 22-25 depend therefrom.

Claims 11-12 and 14-15 stand objected to for informality reasons. Claims 11 stands objected to because the limitation of "an exterior oxidized surface...is oxidized" is redundant. Claim 11 has been amended such that the limitation of an "exterior oxidized surface" is now of an "exterior surface".

Claim 12 stands objected to because the limitation of "an exterior oxidized surface...is non-oxidized" is contradictory. Claim 12 has been amended such that the limitation of an "exterior oxidized surface" is now of an "exterior surface".

Claims 14 and 15 are objected to because antecedent basis is lacking for the limitation of "said non-magnetic non-corrosive iron-based material". Claims 14 and 15 have been amended such that they depend on amended claim 1 and the limitation of "said non-magnetic non-corrosive iron-based material" is now "said non-sprayed-on non-corrosive sleeve" for which there is antecedent basis in claim 1.

Claims 1-4 and 17-19 stand rejected under 35 U.S.C. 102(b) as being anticipated by Klostermann (USPN 5,185,774). Note that claim 17 has been canceled.

The limitations of claims 1 and 18 are similar and are thus described together. Amended claim 1 recites an x-ray tube rotor assembly having a rotor core with a slot and a bar. A non-sprayed-on non-corrosive sleeve is coupled to and partially covering the rotor core. Amended claim 18 recites a method of producing an imaging x-ray tube rotor assembly that includes forming a rotor core and a sleeve produced partially from a non-magnetic, non-sprayed-on, non-corrosive material over the rotor core.

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The utilization of a non-sprayed-on and non-corrosive sleeve coupled to or over an x-ray tube rotor can be used to dissipate a large amount of heat generated within an x-ray tube and prevent x-ray tube assembly components from corroding and flaking. Also, since the sleeve is not sprayed on to the x-ray tube rotor assembly, the sleeve does not flake or peel over time, like prior coating methods.

Klostermann '774 discloses a magnetic drive assembly having a magnetic rotor formed of a magnetic material. Klostermann '774 fails to disclose a non-sprayed-on non-corrosive sleeve as claimed and as described above.

In order for a reference to anticipate a claim the reference must teach or suggest each and every element of that claim, see MPEP 2131 and *Verdegrad Bros. V. Union Oil Co. of California*, 814 F.2d 628. Thus, since each and every element of amended claims 1 and 18 are not taught or suggested by Klostermann '774, Applicants submit that claims 1 and 18 are novel, nonobvious, and are in a condition for allowance in view of Klostermann '774. Applicants submit that since claims 2-4 and claim 19 depend from claims 1 and 18, respectively, they are also novel, nonobvious, and are in a condition for allowance for at least the same reasons.

Claims 1, 2, 5, 17-18, and 25 stand rejected under 35 U.S.C. 102(b) as being anticipated by Decou (USPN 6,144,720).

Decou discloses an x-ray tube rotor having an iron-oxide coating. As with Klostermann '774, Decou does not teach or suggest a non-sprayed-on non-corrosive sleeve as claimed. The application of a coating, whether sprayed on or applied via a deposition process, is a coating or film not a sleeve. Applicant submits that Decou does not disclose the use of a sleeve, but rather a coating. A coating may flake or peel off over time, unlike a sleeve.

The Office Action states that Decou discloses a non-corrosive material and refers to the iron-oxide layer 58. Applicants submit that although the iron-oxide layer of Decou prevents rust formation that does not imply that it is non-

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corrosive. Applicants submit that the iron-oxide layer does flake and peel off. This is inferred in col. 3, lines 67-68, in which Decou stated that the iron-oxide coating has a lower tendency to peel. A "lower tendency to peel" implies that the coating does at least to some extent peel. Applicants also note that "reducing the amount of particles generated" does not imply non-corrosive, but rather simply that the amount of corrosion is reduced.

Thus, Decou fails to teach and suggest each and every element of claims 1 and 18, therefore claims 1 and 18 are novel, nonobvious, and are in a condition for allowance in view of Decou. Also, since claims 2, 5, 19-20, and 22-25 depend from claims 1 and 18, respectfully, they are also novel, nonobvious, and are in a condition for allowance for at least the same reasons.

Claims 1-4, 6-9, 16-19, 23, and 24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Klostermann (USPN 5,056,126) in view of Klostermann '774.

Amended claim 16 recites an imaging x-ray tube rotor assembly that also includes the limitations of a non-sprayed-on sleeve coupled to and over a rotor core and the use of a non-corrosive material. With respect to claim 16, the rotor core is formed partially of a non-corrosive material, specifically stainless steel.

Klostermann '126 discloses an x-ray tube having a squirrel cage rotor. The Office Action states that Klostermann does not disclose the use of a magnetic non-corrosive material. Applicants agree. The Office Action further states that since Klostermann '126 discloses the connection between the squirrel cage and a stainless steel support sleeve that non-corrosive materials are important. Applicants submit that although a stainless steel sleeve is utilized to support the squirrel cage and although stainless steel happens to be non-corrosive, that does not imply that non-corrosive materials were important or the use of non-corrosive materials were even contemplated. Applicants submit that nowhere in Klostermann '126 is the use of non-corrosive materials or the importance thereof expressly mentioned. Applicants suggest that Klostermann '126 may have used

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stainless steel for its strength and rigidity properties in supporting the squirrel cage, as opposed to its non-corrosive properties.

Applicants also submit that Klostermann '126, as with Klostermann '774 and Decou, fails to teach or suggest a non-sprayed-on sleeve coupled to or over a rotor core. The Office Action states that Klostermann '774 teaches the use of stainless steel in rotor driven mechanisms. Although Klostermann '774 discloses the use of a stainless steel cylindrical member 177, a stainless steel circular plate 182, and a stainless steel magnetic rotor 184, Klostermann '774, as stated, fails to teach or suggest the use of a stainless steel sleeve over a rotor core. Both Klostermann '126 and Klostermann '774 fail to teach or suggest the use of a sleeve over a rotor core.

Referring to MPEP 706.02(j) and 2143, to establish a *prima facie* case of obviousness the prior art references must teach or suggest all the claim limitations. Since, both Klostermann '126 and Klostermann '774 fail to teach or suggest each and every element of claims 1, 16, and 18, they are novel, nonobvious, and are in a condition for allowance in view of Klostermann '126 and Klostermann '774. Also, since claims 2-4, 6-9, 19, and 23-24 depend from claims 1 and 18, respectfully, they are also novel, nonobvious, and are in a condition for allowance for at least the same reasons.

Claims 1-2, 10, 12-15, 18, and 20-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Siemens (USPN 5,553,114) in view of Klostermann '774.

Siemens discloses an x-ray tube rotor having an emissive coating. The outer surface of the rotor is coated with a thermal emissive coating 96 for radiating excessive heat. The coating is applied via the spraying of a plasma on the rotor.

Siemens also fails to teach or suggest the use of a non-sprayed-on non-corrosive sleeve over an x-ray tube rotor. The Office Action states that Siemens discloses a sheet 92 and a sleeve 96. Applicants submit that Siemens discloses a coating 96 not a sleeve, see col. 6, lines 33-37. The coating of Siemens as with

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other coatings may flake or peel off over time. Also, the coating of Siemens is sprayed on, see col. 8, lines 46-47.

Thus, Siemens, as with Klostermann '774, Decou, and Klostermann '126, fails to teach or suggest the use of a non-sprayed-on non-corrosive sleeve covering or over an x-ray tube rotor. Therefore, claims 1 and 18 are novel, nonobvious, and are in a condition for allowance in view of Siemens and Klostermann '774. Since claims 2, 10, 12-15, and 20-21 depend from claims 1 and 18, respectfully, they are also novel, nonobvious, and are in a condition for allowance for at least the same reasons.

Claims 5, 11, 22, and 25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Siemens and Klostermann '774, as applied to claims 2, 10, 18, and 21, in view of Warren (USPN 6,390,875).

Warren discloses a method of oxidizing an x-ray tube component. Warren also fails to teach or suggest the use of a non-sprayed-on non-corrosive sleeve over an x-ray tube rotor. Applicants submit that since Siemens, Klostermann '774 and Warren fail to teach or suggest each and every element of claims 5, 11, 22, and 25, that they are also novel, nonobvious, and are in a condition for allowance.

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In light of the amendments and remarks, Applicants submit that all of the objections and rejections are now overcome. The Applicants have added no new matter to the application by these amendments. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited. Should the Examiner have any questions or comments, he is respectfully requested to call the undersigned attorney.

Respectfully submitted,

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